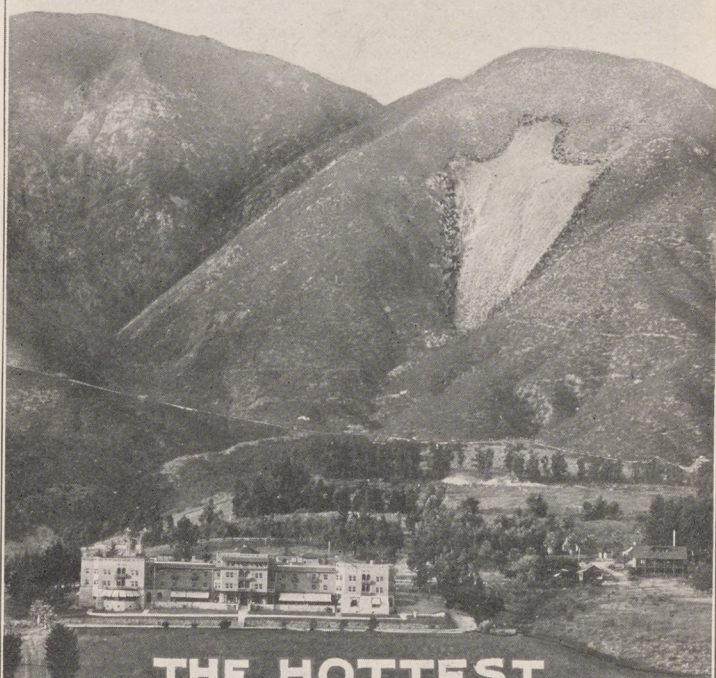


ARROWHEAD HOT SPRINGS



**THE HOTTEST
CURATIVE SPRINGS
IN THE WORLD
ARROWHEAD, CALIFORNIA.**

The Arrowhead Hot Mineral Springs

The famous Spas of Europe attract annually thousands of Americans who suffer much inconvenience, spend large sums of money, and endure many discomforts in order to reach them.

Within sixty miles of Los Angeles are situated the Arrowhead Springs, whose curative waters are as valuable as any in Europe. One of these springs, known as the Penyugal, has a temperature of 202° Fahrenheit, with an output of 55,000 gallons in the 24 hours. This spring will soon be as much sought after as any on the continent, as upon expert analysis it has been found to contain 1/23 of a grain of Di-Sodium Arsenate to the United States gallon, in addition to salts of Sodium, Potassium and Magnesium. No other known spring can claim to have the four combined characteristics as exist in Arrowhead's Penyugal: 1. The strength of its Arsenic salt. 2. The penetration of its steam into caves. 3. Its elevation. 4. The high temperature of its water. With an elevation of 2000 feet above the sea level, Arrowhead has an equable and salubrious climate, added to which, it is surrounded by pine-fringed mountains, cleft by romantic canyons of mystic beauty.

Three transcontinental lines reach San Bernardino, from whence an electric line runs to the springs, a distance of six miles. From Los Angeles there are eight electric cars daily.

Beautiful Arrowhead Hotel is a modern, up-to-date, steam-heated structure, the foundation of which is built of huge boulders from off the Estate, the rest of the building being of cement over which clammers Boston Ivy, purple Wisteria and other trailing vines. A battlement rises from the top of the building and forms a delightful roof-garden.

The resort embraces 1800 acres of ground, the hotel maintaining its own dairy, poultry and vegetable ranches. The bath-houses connected with the hotel are supplied by the hot and cold mineral water piped from the Springs. This same water also supplies the bedrooms. The large swimming pool is also supplied with mineral water piped direct from one of the bubbling springs. In the way of athletic attractions, there is the double tennis court, the athletic farm and a well-equipped stable where burros and saddle horses can be procured for a delightful ride over safe trails to the far top of the mountains, where resorts nestle amid the great pine forests. Good roads for autos lead also to the top of the mountains, and there are innumerable trails in the canyons.



Open Air
Plunge
at Arrowhead

The Mud Baths

The Mud-Bath is separate and distinct from all other kinds of baths. It can be borne at a higher temperature than one of water, and therefore aids the absorption of the saline constituents and volatile gases. It is not only the high temperature of the mud, but its weight as well that gives the mud pack its beneficial effect in such affections as Myalgia and Joint enlargements, etc. As will be seen by the analysis given below, the peculiar form of the Arrowhead mud is found in no other place in the United States. Prof. Wilhelm Wintermütz of Vienna, Austria, in his work on "Hydrotherapy," mentions but five mud resorts, of which he places Arrowhead first on the list.

Analysis Arrowhead Hot Mud Deposit

CURTIS & TOMPKINS
ANALYTICAL
INDUSTRIAL AND ENGINEERING
CHEMISTS

108 FRONT STREET NORTHEAST CORNER PINE
SAN FRANCISCO, CAL.

December 30, 1914.

MR. SETH MARSHALL,
Arrowhead Hot Springs, Cal.

Dear Mr. Marshall:

HOT MUD DEPOSIT CONCERNING NO. 24236

We enclose herewith report in duplicate on our examination of your sample of mud, which of necessity is reported under three columns.

It contains, according to our previous anticipation in correspondence of October 16th, 1914, a much higher proportion of salts, and also contains Sodium Bicarbonate in notable proportions. This condition is one naturally to be expected where the outflow is not as great as the inflow. In other words, this mud is constantly exposed to atmospheric conditions wherein the carbon dioxide gas is absorbed from the air, and at the same time a continuous evaporation is going on creating concentration of the salts and an interchange of chemical reactions with the mineral matter of the mud.

Yours very truly,
(Signed) CURTIS & TOMPKINS.

Where Does This Mud Gets Its Heat

It is natural, being Nature's production. Coming from the hot waters of the Palm Spring, its heat is generated thousands of feet below the earth's surface. The chemical nature of this health restoring mud comes from the chemically charged hot waters that constantly permeate it; these hot waters take on their chemical nature from minerals with which they come in contact on their way to the earth's surface from the great depth from which they come—in other words, from Nature's chemical laboratory. The intense heat to which this water is subject, together with its chemical properties, renders it thoroughly antiseptic. This antiseptic water constantly permeating the mud renders that also antiseptic, making it purifying and healing to a wonderful degree; also making it at all times a uniform and homogenous material which is an absolutely clean, antiseptically pure mud.

Rest and Recuperate at Arrowhead



Patient Taking One of the Famous Mud Baths

Analysis of water contained in mud:

Hypothetical Form of Combination	Grains per U. S. Gal.	Parts per Million	Gr. per cu. ft. of Mud
Ammonium Chlorid (NH_4Cl).....	0.372	6.39	1.95
Lithium Chlorid (LiCl).....	Trace	Trace	Trace
Potassium Chlorid (KC_1).....	3.982	68.3	20.87
Sodium Chlorid (NaCl)	10.176	174.5	53.30
Sodium Sulphate (Na_2SO_4).....	68.756	1179.0	360.1 ¹
Sodium Metaborate (NaBO_2)	6.706	115.0	35.15
Di-Sodium Arsenate (Na_2HAsO_4).....	0.145*	2.492	0.76
Sodium Bi-Carbonate (NaHCO_3).....	30.150	517.0	158.0
Calcium Bi-Carbonate ($\text{Ca}(\text{HCO}_3)_2$).....	18.311	314.0	95.90
Calcium Phosphate ($\text{Ca}_3\text{P}_2\text{O}_8$).....	Faint Trace		Faint Trace
Magnesium Sulphate (MgSO_4).....	0.658	11.3	3.44
Mangano Manganic Oxide (Mn_3O_4).....	Faint Trace		Faint Trace
Ferric Oxid and Alumina ($\text{Fe}_2\text{O}_3\text{-Al}_2\text{O}_3$)..	0.155	2.68	0.81
Silica (SiO_2)	9.143	156.8	47.8
	148.554	2547.462	778.08

*1/7 gr. per gal.

Leading Physicians Recommend Arrowhead

1518 LE ROY AVENUE
BERKELEY, CALIFORNIA

October 24, 1914.

My Dear Mr. Marshall:

Yours of the 22nd inst. just at hand. Arsenic in a Natural Mineral Water has not the ill effects attributed to that chemical element in other forms, yet after its protracted use Arsenic is found in all the tissues—the blood, skin and hair.

The baths are stimulating and promote oxidation, tissue changes and diuresis.

On the skin, as applied in your Steam-Caves, it produces a soft, unctuous feeling, most calming and comforting in skin affections. The inhalation of the steam would have a most beneficial effect in certain affections of the respiratory organs, as chronic catarrhs of the larynx, trachea and bronchii, in the arthritic and neurotic.

Infantile Asthma, which often coincides with enlargement of the bronchial glands is often cured by it. Early or very slightly advanced non-febrile cases of pulmonary tuberculosis, or persons apparently threatened with that disease would greatly benefit by this treatment at the altitude of Arrowhead.

With regard to the internal use of arsenic water, it should be drunk at a temperature of about 104 F., in doses varying from 3 to 20 ounces, divided into three portions at different times in the day. When very large doses are thought necessary, a portion is often given by enema.

Of the cases adapted to treatment, SKIN AFFECTIONS stand in the first rank, especially those forms that have proved rebellious to other kinds of treatment, and although some of these prove intractable to this, as to other methods of treatment, there are very few that do not receive some benefit.

The list drawn up by authorities on skin affections as amenable to the arsenic treatment is a long one, and includes ichthyosis, psoriasis, pityriasis rubra, eczema, lichen rubra, prurigo, erythema induratum, tuberculous affections, acne, boils, chronic urticaria, etc.

The chronic diseases of children occupy the next place, especially the glandular and osseous affections of the lymphatic and scrofulous,—particularly those children with whom the sea-side disagrees. Sufferers from Anaemia and Chlorosis benefit greatly by the arsenic course where the iron treatment is contra-indicated.

Sincerely yours,
(Signed) F. C. S. SANDERS, M. D.

Analysis Arrowhead Waters

Grains per Gallon

By Curtis & Tompkins, Chemists

SAN FRANCISCO, CAL.

	Ammonium Chlorid	Lithium Chlorid	Potassium Chlorid	Sodium Chlorid	Sodium Sulphate	Sodium Metaborate	Di-Sodium Arsenate	Magnesium Sulphate	Calcium Phosphate	Calcium Bicarbonate	Manganio-Manganic-Oxide	Ferrous Oxide & Alumina	Calcium Silicate	Silica	TOTAL
Penyugal Hot Spring	0.008	TRACE	1.853	5.680	45.604	2.414	0.0435	0.256	TRACE	6.566	TRACE	0.087	0.559	5.423	68.493
Steam Caves	0.005	FAINT TRACE	2.450	5.20	40.12	1.60	0.037	0.29	TRACE	6.53	FAINT TRACE	0.11	5.95	62.292
Granite Hot Spring	0.0064	FAINT TRACE	1.475	5.983	42.986	2.076	0.0288	0.116	FAINT TRACE	6.094	FAINT TRACE	0.005	0.102	5.968	64.840
Palm Hot Spring	0.007	FAINT TRACE	1.43	5.23	37.55	1.54	0.034	0.23	TRACE	6.79	FAINT TRACE	0.12	5.86	58.791

Magnificently Situated—Altitude 2,000 Feet

LABORATOIRE MUNICIPAL DE CHIMIE
Analyse quantitative N° 848

Le Directeur du Laboratoire municipal certifie que l'échantillon déposé sous le n° 860 par M^r le Docteur Dandaz, comme eau minérale, contient

marque, Geyser, Hot Spring

en grammes par litre :

Acide carbonique en CO_2	0,0314
d' sulfurique en SO_2	0,4242
d' bouique en BO_2H	0,0406
d' arsenique en As_2O_3	0,00017
d' Azotique:	traces
Chlore:	0,0343
Silice:	0,1050
Oxyde ferrique et aluminé;	0,0050
d' de manganèse:	traces
Chaux (CaO)	0,0453
Magnésie (MgO)	0,0022
Potasse (K_2O)	0,0112
Soude (Na_2O)	0,4632
Lithine: décelable au Spectroscope	traces
Cuivre:	traces

Résidu sec fixe à $180^\circ = 1,91120$

Le groupement hydrochlorique formant les composés suivants:

Bicarbonates de calcium:	0,1175
Chlorure de sodium:	0,1259
d' de potassium:	0,0112
d' de lithium:	traces
Métaborate de sodium (BO_2Na)	0,0454
Argénate de sodium (AsO_4HNa)	0,0022
Phosphate de sodium (PO_4HNa)	0,0440
Sulfate de sodium (SO_4Na)	0,7540
d' de magnésium (SO_4Mg)	0,0050
Silice:	0,0050
Oxyde de fer et aluminé:	traces
d' de manganèse:	traces
Nitrates:	traces
Cuivre:	traces

Total par litre: 1,91120

22 Septembre 1914

LABORATOIRE MUNICIPAL DE CHIMIE
DIRECTEUR DU LABORATOIRE MUNICIPAL,
PROFESSEUR

Toute personne qui, par le présent bulletin, aura nuire à la réputation d'autrui, commettra le délit de diffamation.

The only analysis of American Mineral Water ever made by the French Government.

How Do They Act Curatively?

As they have a high specific gravity, some portions of the waters of the mud pass through the skin and the mineral contents are taken up by the blood and fluids of the body, as may be shown by testing the blood and urine after and before taking the bath. A mud bath can be borne at a higher temperature than one of water, on account of its low conducting power of heat; this aids in the absorption of the saline mineral constituents and volatile gases. It is not only the high temperature of the mud, but its weight as well, that gives the mud pack its beneficial effect in such affections as enlargement of the liver, or in joint affections of rheumatic, gouty, syphilitic or stumous origin.

RADIUM DISCOVERED AT ARROWHEAD

The scientific and thorough examination of the Hot Springs and property of the Arrowhead Hot Springs Company by Prof. Gilbert E. Bailey, Professor of Geology in the University of Southern California, has revealed some very interesting facts; the most important one being the discovery of the radio-activity of both the hot water and the mud at this famous resort.

The great efficacy of radio-active water in the treatment of rheumatism, gout, stomach, liver, kidney and kindred troubles, is just beginning to be known.



The Natural Steam Caves

About half a mile from the hotel, on the east side of the Waterman Canyon, are the Steam Caves. They have been artificially formed and consist of tunnels cut into the bluff from the sides, roofs and floors of which the Arsenicated Steam issues. Small cottages equipped as dressing rooms are connected with the caves by a covered way.

In these radio-active steam caves are administered the most effective and curative baths in the world. Nothing like them exists anywhere. They open the pores of a dormant, sluggish skin, making it active, causing the elimination of the accumulated poisons in the body the overworked liver and kidneys are unable to expell.

Arrowhead Springs are especially beneficial for the relief of **Eczema** and other **Skin Diseases**, Catarrhal affections, Asthma, Neurasthenia, Anaemia, Chlorosis, Neuralgia, Insomnia, Rheumatism in all its forms, Gout and Lumbago.

Intending guests should write to the Medical Director, stating the nature of their case, and letters from the guests' physician will receive careful consideration.

NO CASE OF TUBERCULOSIS OR OTHER INFECTIOUS DISEASE WILL BE RECEIVED.



Pavilion Over One of the Mineral Springs



Famous Arrowhead Covering 7 1-2 Acres on Arrowhead Mountain

Comparative Temperatures

Arrowhead has the hottest curative springs in the world

PLACES	NAME OF SPRINGS	Tem. Deg. F.
CALIFORNIA	ARROWHEAD	202
Carlsbad (Bohemia).....	Sprudel	164
Weisbaden (Germany).....	Kochbrunnen	156
Baden Baden (Germany).....	Hauptquelle	155
Amelie-les-Baines (Pyrenees).....	Fontaine Arago.....	145
Carlsbad (Bohemia).....	Theresienbrunnen	131
Aix-le-Chappelle (Germany).....	Kaiserquelle	131
Leuk (Switzerland).....	Hauptquelle	125
Arkansas (U. S. A.).....	Arkansas	122
Gastein (Austria).....	Hauptquelle	120
Teplitz (Bohemia).....	Hauptquelle	120
Bath (England).....	King's Bath.....	119
Aix-les Bains (Savoy).....	Alum Spring.....	116
Carlsbad (Bohemia).....	Schlossbrunnen	113
Bareges (Pyrenees).....	Le Tambour.....	113
Gastein (Austria).....	Doctorsquelle	111
Vichy (France).....	Grand Grille.....	108

The stimulative effect produced by the high temperature of Arrowhead waters often proves very beneficial in cases of paralysis.

Some idea of the intense heat may be gathered from the fact that eggs can be nicely boiled in the springs in from three to five minutes.



Boiling Eggs in El Penyugal Spring



Arrowhead Hot Springs Resort Open All the Year

1. Natural Steam Caves.
2. Possesses the hottest curative springs in the world
—202° F.
3. Chemical Composition of the water almost identical with the famous Carlsbad Springs of Germany, but in about half the amount per gallon and double the strength of the waters of Arkansas Hot Springs. Besides, the waters of Arrowhead contain Di-Sodium Arsenate, the rarest and most valued tonic and curative ingredient known in mineral waters.
4. Relieves countless ailments.
5. Ideal climatic conditions—mean winter temperature 50 degrees; mean summer, 62 degrees.
6. Beautiful and commodious hotel with every accessory of luxury and comfort, including steam heat and hot and cold mineral water piped to all guest rooms, tennis courts, etc.
7. Home grown chickens, dairy and vegetable products.
8. Resident physician of many years' experience as a water cure specialist.
9. Miles of beautiful mountain trails, roads and romantic canyons, and an open air plunge.
10. Two beautiful Trout Streams run thru property.

Postoffice and Express office located in the hotel.
(Arrowhead Springs P. O.)

For information, terms and further literature
Write to

Arrowhead Hot Springs Co.

ARROWHEAD SPRINGS, SAN BERNARDINO COUNTY
CALIFORNIA

How to Get to Arrowhead

Three transcontinental lines—the Santa Fe, Southern Pacific and Salt Lake—lead to Arrowhead Hot Springs, and from the windows of their palatial Pullmans can be seen the famous Arrowhead—the Indian sign—which blazons on the side of the mountain and points to the hotel. All trains on these lines stop at San Bernardino, and at this point connection is made with the Pacific Electric Railway, which leads direct to Arrowhead hotel.

The Pacific Electric operates through cars from Los Angeles to Arrowhead over the new San Bernardino line. Splendid concrete and macadamized automobile boulevards also connect the hotel with Los Angeles, Riverside, Redlands and the surrounding country, leading through miles of orange groves and some of the most beautiful scenery to be found on the continent.

Arrowhead Bottled Water

The Monarch of All Waters

Arrowhead Water is conceded by eminent doctors and scientists one of the finest mineral waters in the world. It ranks with the famous Carlsbad Sprudel of Germany, the French Vichy and other famous European waters.

Arrowhead Water is efficacious in the treatment of dyspepsia and all stomach troubles; in diabetes or other complaints of the liver or kidneys; in correcting catarrhal conditions of the mucous membranes.

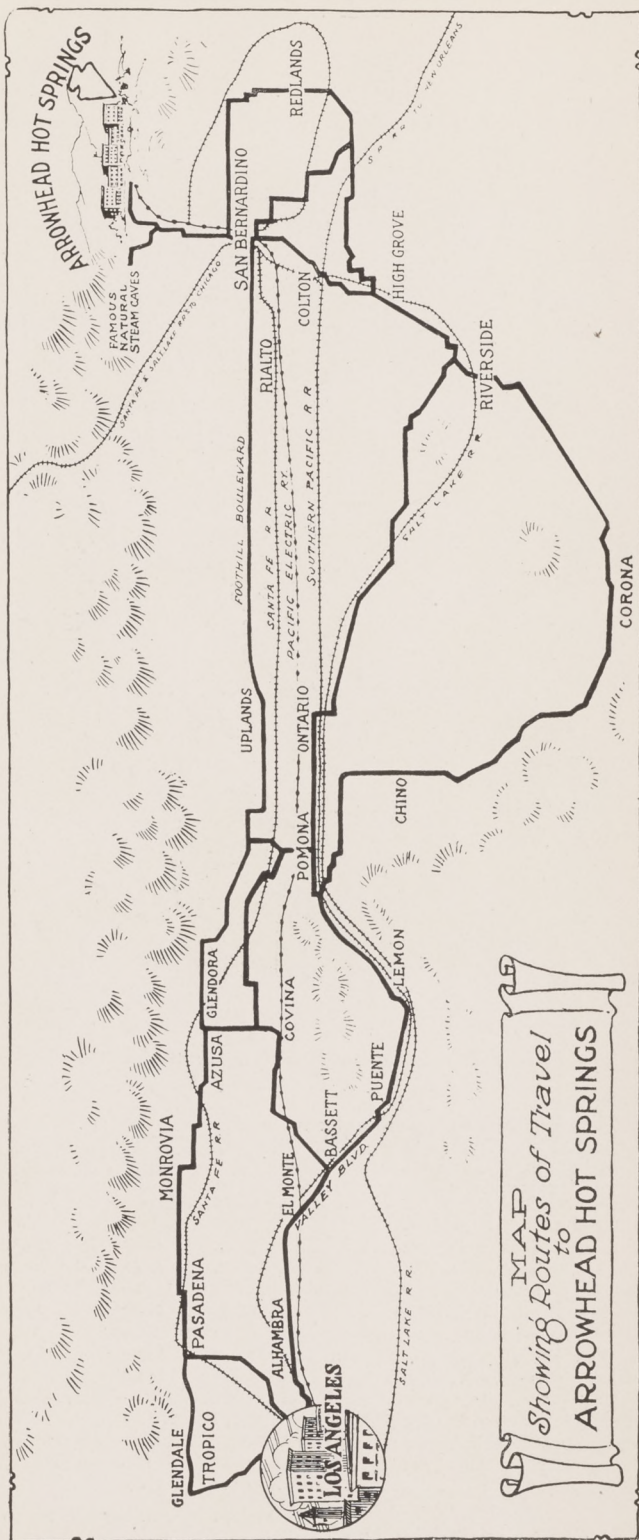
Arrowhead Water is thermal, alkaline, alkaline-saline, sulphuretted, sodic, lithic magnesia, calcic, potassic and silicious. It has been a boon in the treatment of obesity, hepatic and urinary troubles.

Arrowhead Water will be shipped direct from **ARROWHEAD SPRINGS**, Arrowhead, San Bernardino County, California, to any part of the United States.

See That This Label Is on Every Bottle



Easily Accessible by Auto or Train



ARROWHEAD HOT SPRINGS



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